



# 2

## SEQUENCE LISTING

<110> David Michalovich  
Matthew Alan Sims  
Narjis Shaikh

<120> NOVEL COMPOUNDS

<130> GP-30088-D1

<140> 09/943,689  
<141> 2001-08-31

<150> US 09/184,001  
<151> 1998-11-02

<150> UK 9806221.9  
<151> 1998-03-23

<150> UK 9817479.0  
<151> 1998-08-11

<160> 4

<170> FastSEQ for Windows Version 3.0

<210> 1  
<211> 2186  
<212> DNA  
<213> HOMO SAPIENS

<400> 1

cttggcacga	ggcctcggtgc	caggcggcat	gagggccccgc	ggcccgggggg	gctgaggcgc	60
ccggcgccctg	ccgcgggggc	cgctcgcgtc	ctccatggag	gccggagagg	aaccgctgct	120
gctggccgaa	ctcaagccccg	ggcgccccca	ccagtttgat	tggaagtcca	gctgtgaaac	180
ctggagcgctc	gccttctccc	cagatggctc	ctggtttgct	tggctcaag	gacactgcat	240
cgtcaaaactg	atcccctggc	cgttggagga	gcagttcattc	cctaaagggt	ttgaagccaa	300
aagccgaagt	agcaaaaatg	agacgaaagg	gcggggcagc	ccaaaagaga	agacgctgga	360
ctgtggtcag	attgtctggg	ggctggcctt	cagccctgtgg	ccttccccac	ccagcaggaa	420
gctctgggca	cgcaccacc	ccaaagtgcc	cgatgtctct	tgccctggttc	ttgctacggg	480
actcaacgat	gggcagatca	agatctggga	ggtgcagaca	gggctctgc	ttttgaatct	540
ttccggccac	caagatgtcg	tgagagatct	gagtttcaca	cccagtggca	gtttgatttt	600
ggtctccgcg	tcacgggata	agactcttcg	catctggac	ctgaataaaac	acggtaaaca	660
gattcaagtg	ttatcgggcc	acctgcagtg	ggtttactgc	tgttccatct	ccccagactg	720
cagcatgctg	tgctctgcag	ctggagagaa	gtcggtcttt	ctatggagca	tgaggcccta	780
cacgtaatt	cggaagctag	agggccatca	aagcagtgtt	gtctcttgc	acttctcccc	840
cgactctgcc	ctgcttgtca	cggttcttta	cgataccaat	gtgattatgt	gggaccccta	900
caccggcgaa	aggctgaggt	cactccacca	cacccaggtt	gaccccgcta	tggatgacag	960
tgacgtccac	attagctcac	tgagatctgt	gtgctctct	ccagaaggct	tgtacctgc	1020
cacgggtggca	gatgacagac	tcctcaggat	ctggggccctg	gaactgaaaa	ctcccattgc	1080
atttgctctt	atgaccaatg	ggctttgctg	cacattttt	ccacatggtg	gagtcttgc	1140
cacagggaca	agagatggcc	acgtccagtt	ctggacagct	cctagggtcc	tgtcctcaact	1200
gaagcactta	tgccggaaag	cccttcgaag	tttcctaaca	acttaccaag	tccttagact	1260
gccaatcccc	aagaaaaatga	aagagttcct	cacatacagg	acttttaag	caacaccaca	1320
tcttgctt	ctttgttagca	gggttaatcg	tcctgtcaaa	gggagttgct	ggaataatgg	1380

gccaaacatc	tggcttgca	ttgaaatagc	atttcttgg	gattgtgaat	agaatgtgc	1440
aaaaccagat	tccagtgtac	tagtcatgga	tctttctctc	cctggcatgt	gaaagtca	1500
cttagaggaa	gagattccac	ttgcacggca	acagagcctt	acgttaaattt	ttcagtcag	1560
ttatgaacag	caagtgtga	actcttcgt	cttgcggca	ttcaaagtgc	agttactgat	1620
gttgcggca	ttatgcact	aagtggcct	ccagagecctc	tctgtggca	gagcaactca	1680
cactccctcc	gctggaaacg	atggcttcgt	cctgtaccc	atccttgcgt	ttctgtatgc	1740
gtggtagcat	tggccaatgt	tctctctgc	tgtggcaga	tttgcggca	tttgcggca	1800
gtgcggccaa	tcttgggctc	ccttcgtacc	tgcaggacag	tttgcggca	gccattgg	1860
atgaggattt	aatttagctt	aactaaat	caggggactc	agaggccgt	ctcctgaccg	1920
atccagacac	tattactggc	ttttttttt	ttttttttaa	caatgggtgt	catgtgcagg	1980
aaatgacaaa	tttgcgtatgc	agattataca	aggatgtatt	cttaaacccgc	atgactattc	2040
agatggctac	tgcgttatca	gtggccattt	attagcatca	tatttatttgc	tatttctca	2100
acagatgtta	aggtacaact	gtgttttct	cgattatcta	aaaaccatag	tacttaaatt	2160
aaaaaaaaaa	aaaaaaaaaa	aaaaaaa	aaaaaa	aaaaaa	aaaaaa	2186

<210> 2  
 <211> 404  
 <212> PRT  
 <213> HOMO SAPIENS

<400> 2																
Met	Glu	Ala	Gly	Glu	Glu	Pro	Leu	Leu	Leu	Ala	Glu	Leu	Lys	Pro	Gly	
1				5				10					15			
Arg	Pro	His	Gln	Phe	Asp	Trp	Lys	Ser	Ser	Cys	Glu	Thr	Trp	Ser	Val	
							20		25					30		
Ala	Phe	Ser	Pro	Asp	Gly	Ser	Trp	Phe	Ala	Trp	Ser	Gln	Gly	His	Cys	
								35		40			45			
Ile	Val	Lys	Leu	Ile	Pro	Trp	Pro	Leu	Glu	Glu	Phe	Ile	Pro	Lys		
								50		55			60			
Gly	Phe	Glu	Ala	Lys	Ser	Arg	Ser	Ser	Lys	Asn	Glu	Thr	Lys	Gly	Arg	
								65		70			75			80
Gly	Ser	Pro	Lys	Glu	Lys	Thr	Leu	Asp	Cys	Gly	Gln	Ile	Val	Trp	Gly	
								85		90			95			
Leu	Ala	Phe	Ser	Pro	Trp	Pro	Ser	Pro	Pro	Ser	Arg	Lys	Leu	Trp	Ala	
								100		105			110			
Arg	His	His	Pro	Gln	Val	Pro	Asp	Val	Ser	Cys	Leu	Val	Leu	Ala	Thr	
								115		120			125			
Gly	Leu	Asn	Asp	Gly	Gln	Ile	Lys	Ile	Trp	Glu	Val	Gln	Thr	Gly	Leu	
								130		135			140			
Leu	Leu	Leu	Asn	Leu	Ser	Gly	His	Gln	Asp	Val	Val	Arg	Asp	Leu	Ser	
								145		150			155			160
Phe	Thr	Pro	Ser	Gly	Ser	Leu	Ile	Leu	Val	Ser	Ala	Ser	Arg	Asp	Lys	
								165		170			175			
Thr	Leu	Arg	Ile	Trp	Asp	Leu	Asn	Lys	His	Gly	Lys	Gln	Ile	Gln	Val	
								180		185			190			
Leu	Ser	Gly	His	Leu	Gln	Trp	Val	Tyr	Cys	Cys	Ser	Ile	Ser	Pro	Asp	
								195		200			205			
Cys	Ser	Met	Leu	Cys	Ser	Ala	Ala	Gly	Glu	Lys	Ser	Val	Phe	Leu	Trp	
								210		215			220			
Ser	Met	Arg	Ser	Tyr	Thr	Leu	Ile	Arg	Lys	Leu	Glu	Gly	His	Gln	Ser	
								225		230			235			240
Ser	Val	Val	Ser	Cys	Asp	Phe	Ser	Pro	Asp	Ser	Ala	Leu	Leu	Val	Thr	
								245		250			255			
Ala	Ser	Tyr	Asp	Thr	Asn	Val	Ile	Met	Trp	Asp	Pro	Tyr	Thr	Gly	Glu	
								260		265			270			
Arg	Leu	Arg	Ser	Leu	His	His	Thr	Gln	Val	Asp	Pro	Ala	Met	Asp	Asp	
								275		280			285			

Ser Asp Val His Ile Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu  
 290                    295                    300  
 Gly Leu Tyr Leu Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp  
 305                    310                    315                    320  
 Ala Leu Glu Leu Lys Thr Pro Ile Ala Phe Ala Pro Met Thr Asn Gly  
 325                    330                    335  
 Leu Cys Cys Thr Phe Phe Pro His Gly Gly Val Ile Ala Thr Gly Thr  
 340                    345                    350  
 Arg Asp Gly His Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser  
 355                    360                    365  
 Leu Lys His Leu Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr  
 370                    375                    380  
 Gln Val Leu Ala Leu Pro Ile Pro Lys Lys Met Lys Glu Phe Leu Thr  
 385                    390                    395                    400  
 Tyr Arg Thr Phe

<210> 3  
 <211> 2558  
 <212> DNA  
 <213> HOMO SAPIENS  
 <220>  
 <221> UNSURE  
 <222> (146) (161) (178) (233) (254) (296)

<400> 3

gaaaggaacc	gctgcgtctg	gccgaactca	agccccggcg	cccccacca	tttattggaa	60
agtccagctg	tgaaaacctgg	agcgtcgct	tctccccaga	tggtctctgg	tttgccttgg	120
ctcaaggaca	ctgcacatgtc	aaactnatcc	cctggccgtt	ngaggagcag	ttcatccnta	180
aagggtttga	agccaaaagc	cgaagttagca	aaaatgagac	gaaaggccgg	gnagnatccaa	240
aagagaagac	gctngactgt	ggtcagattt	tctggggct	ggccttcagc	ctgtgncttt	300
ccccacccag	caggaagctc	tgggcacggc	accacccca	agtgcggat	gtctcttgcc	360
tggttcttgc	tacgggactc	cacgtgggc	agatcaagat	ctgggaggtg	cagacaggc	420
tcctgctttt	aatctttcc	ggccaccaag	atgtcgttag	agatctgagc	ttcacaccca	480
gtggcagttt	gattttggtc	tccgcgtc	ggataaagac	tcttcgcac	ttggacactga	540
ataaaacacgg	taaacagatt	caagtgttat	cgggcacact	gcagtgggt	tactgtgtt	600
ccatctcccc	agactgcagc	atgcgtgtct	ctgcagctgg	agagaagtgc	gtctttctat	660
ggagcatgag	gtcctacacg	ttaattcgg	agctagaggg	ccatcaaagc	agtgttgtct	720
cttgcgtactt	ctccccccgac	tctgccttc	ttgtcacggc	ttcttacgat	accaatgtga	780
ttatgtggaa	cccctacacc	ggcggaaaggc	tgaggtca	ccaccacacc	cagggtgacc	840
ccgccatgga	tgacagtgac	gtccacatta	gctcaactgag	atctgtgtgc	ttctctccag	900
aaggcttcta	ccttgcacag	gtggcagatg	acagactct	caggatctgg	gcccttggaa	960
tgaaaaactcc	cattgcattt	gctcctatga	ccaatggct	ttgtcgtcaca	tttttccac	1020
atgggtggagt	cattgccaca	gggacaagag	atggccacgt	ccagttctgg	acagctccta	1080
gggtcctgtc	ctcaactgaag	cacttatgcc	ggaaagccct	tcgaagttt	ctaacaactt	1140
accaagtct	agcaactgcca	atccccaaaga	aaatgaaaga	gttcctcaca	tacagactt	1200
ttaagcaac	accacatctt	gtgtttctt	gtacggggt	aaatcgtct	gtcaaaggaa	1260
gttgcgtggaa	taatgggcca	aacatctgg	cttgcattga	aatagcattt	ctttgggatt	1320
gtgaatagaa	tgtacaaaa	ccagattcca	gtgtactagt	catggatctt	tctctccctg	1380
gcatgtgaaa	gtcagtctta	gaggaagaga	ttccacttc	acggcaacag	gccttacgt	1440
taaattttca	gtccagttat	gaacagcaag	tgttgaactc	tttctgttt	ttttgattca	1500
aagtgcagg	actgtatgtt	ttttgattat	gcaactaagt	aggcctccag	agcctctcta	1560
gtggcagagc	agctcacact	ccctccgtg	ggaacgatgg	cttctgcct	gtacctatcc	1620
ttgtgtttct	gatgcgtgg	tagcattgg	tcaagttctc	tcctgtgtg	gtcagagttg	1680
cttcgtatgtt	ggccaaagtgc	ttttcttctt	gggctccctt	ctgacctgc	ggacagttt	1740
cctggagcca	tttggatata	ggttataatt	tagcttaact	aaattacagg	ggactcagag	1800
gcccgtctcc	tgaccgatcc	agacactatt	actggctttt	ttttttttt	tttaacaatg	1860

gtgtgcatgt	gcaggaaatg	acaaaatttg	atgtcagatt	atacaaggat	gtattcttaa	1920
accgcatgac	tattcagatg	gctactgagt	tatcatgtggc	catttatttag	catcatat	1980
atttgtattt	tctcaacaga	tgttaaggtt	caactgtgtt	tttctcgatt	atctaaaaac	2040
catagtactt	aaattgaaca	gttgc当地	tgtcttaatt	gtgtaaagaa	ttgggtgt	2100
catgacttta	gctgatactc	ttatgtacga	gatctgtctc	tgctgtttaa	cttcattgg	2160
ttaatcagct	ggtttcaact	ctactgc当地	acaaaaatag	ctcccttaaaa	gtactgttct	2220
ccttcagttg	catgtatgtt	tctaattcaag	acacccattt	caaacaaaac	ctgcctttag	2280
aaaatttaat	atattttaaa	ttatattttaaa	agaaatataaa	catcttattt	tttagcttcc	2340
ttaatcggtg	ctttatggag	gccagtgtaa	cgttacatga	ctcggtgaga	aagttgagga	2400
atttcctcta	ccacccttgc	tgcttgaaga	aaaacatgtc	tttcaaaat	gagaggctt	2460
cattgaagaa	aagaaaaaaaaa	caacagttaa	aagctattgg	ctctctgttt	catttttttc	2520
cattaagaaa	aaaaaaaaaa	caacagttaa	aagctattgg	ctctctgttt	catttttttc	2558

<210> 4  
 <211> 400  
 <212> PRT  
 <213> HOMO SAPIENS  
 <220>  
 <221> UNSURE  
 <222> (53) (59) (98)

<400> 4  
 Lys Glu Pro Leu Leu Leu Ala Glu Leu Lys Pro Gly Arg Pro His Gln  
 1 5 10 15  
 Phe Asp Trp Lys Ser Ser Cys Glu Thr Trp Ser Val Ala Phe Ser Pro  
 20 25 30  
 Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys Ile Val Lys Leu  
 35 40 45  
 Ile Pro Trp Pro Xaa Glu Glu Gln Phe Ile Xaa Lys Gly Phe Glu Ala  
 50 55 60  
 Lys Ser Arg Ser Ser Lys Asn Glu Thr Lys Gly Arg Gly Ser Pro Lys  
 65 70 75 80  
 Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly Leu Ala Phe Ser  
 85 90 95  
 Leu Xaa Leu Ser Pro Pro Ser Arg Lys Leu Trp Ala Arg His His Pro  
 100 105 110  
 Gln Val Pro Asp Val Ser Cys Leu Val Leu Ala Thr Gly Leu His Asp  
 115 120 125  
 Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu Leu Leu Asn  
 130 135 140  
 Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser Phe Thr Pro Ser  
 145 150 155 160  
 Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys Thr Leu Arg Ile  
 165 170 175  
 Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val Leu Ser Gly His  
 180 185 190  
 Leu Gln Trp Val Tyr Cys Cys Ser Ile Ser Pro Asp Cys Ser Met Leu  
 195 200 205  
 Cys Ser Ala Ala Gly Glu Lys Ser Val Phe Leu Trp Ser Met Arg Ser  
 210 215 220  
 Tyr Thr Leu Ile Arg Lys Leu Glu Gly His Gln Ser Ser Val Val Ser  
 225 230 235 240  
 Cys Asp Phe Ser Pro Asp Ser Ala Leu Leu Val Thr Ala Ser Tyr Asp  
 245 250 255  
 Thr Asn Val Ile Met Trp Asp Pro Tyr Thr Gly Glu Arg Leu Arg Ser  
 260 265 270  
 Leu His His Thr Gln Val Asp Pro Ala Met Asp Asp Ser Val His

275	280	285
Ile Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu Gly Leu Tyr Leu		
290	295	300
Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp Ala Leu Glu Leu		
305	310	315
Lys Thr Pro Ile Ala Phe Ala Pro Met Thr Asn Gly Leu Cys Cys Thr		
325	330	335
Phe Phe Pro His Gly Gly Val Ile Ala Thr Gly Thr Arg Asp Gly His		
340	345	350
Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser Leu Lys His Leu		
355	360	365
Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr Gln Val Leu Ala		
370	375	380
Leu Pro Ile Pro Lys Lys Met Lys Glu Phe Leu Thr Tyr Arg Thr Phe		
385	390	395
		400